

**Summary**

As a head-marking language, Lakhota verbs carry morphology that cross-references NPs in the clauses (that have them) and that provide PRO-nominal references as part of the core verb. The basic pattern of the Lakhota clause found in most all the data in this problem is  $A_T U_T V_T$ , with the typical  $V_T$  pattern as: verb stem + U<sub>PRO</sub> + A<sub>PRO</sub> + verb-stem.

I'm afraid you'll see a lot of gaps in this paper—I'm still not clear on how to go about determining if there's neutralization of semantic roles, despite re-reading the material and stepping through Dyirbal and Acehnese examples (again). It seems to be the case in Lakhota that there is neutralization of semantic roles with the privileged syntactic argument characterized primarily as [S, A<sub>T</sub>]. Based on the data (in particular, examples 32, 38) it seems that Lakhota does not have voice opposition, but has other means that allow grammatical relations of subject and object to shift topic from one clause to the next.

**1. Morphosyntactic Analysis**

As you mentioned in class (and as noted in Van Valin), Lakhota is a head-marking language. That can be seen fairly quickly in looking through the problem data set and organizing into speculative paradigms. Example 1 gives us two different intransitive verbs of motion (in two different directions, away from source, toward source).

1. hí		"arrive"		intransitive verb (motion)		role of actor	
		VERB STEM	UNDERGOER	ACTOR	VERB STEM	PL	
1sg	I arrive			wa	hí	∅	
2sg	you arrive			ya	hí	∅	
3sg	(s)he it arrives			∅	hí	∅	
1pl							
2pl							
3pl	they arrive			∅	hí	pi	

  

yá (?)		"go"		intransitive verb (motion)		role of actor	
		VERB STEM	UNDERGOER	ACTOR	VERB STEM	PL	
1sg	I go			bl	(y?)é	∅	
2sg	you go			l	(y?)é	∅	
3sg	(s)he goes			∅	yé	∅	
1pl							
2pl							
3pl	they go			∅	yá	pi	

Example 1 data for 'I go, you go...' presents what seems to an irregular verb. I'm not sure of the stem of the verb 'go,' but I am fairly certain about the 'bl' being a 1sg PRO (cross-reference) based on these examples:

- Examples 33, 34, 36                      wəwíçhabłake                      'I saw them...
- Example 37                                      wəbláke                                      I saw...
- Example 29-32                                iblúthe                                      I tried...

The verb (stem) itself is another matter. We have imperative example 41, 'Go away!'—Iyáyaye! Assuming that 'ye' is the imperative marker (cf. 40. 'Sleep!' — 'Ištímaye!'), **iyáya** might be the non-finite form of 'go away.' From example 31, 'I tried to run away' — 'Iyáye iblúthe,' it seems that the non-finite form of 'run away' is **iyáye**—so these two verbs (or verb stems) vary by only the a- and e- ending. So I'm not sure what to make of this, or if it's even relevant for this problem.

Example 2, the transitive verb ‘to hear,’ demonstrates that Lakhota uses infixes for the participants involved in the verb. This paradigm was easier to figure out after taking into account all the other examples. From 1, 3, and 4, we can deduce the actor participant (or tentative ‘subject’) as immediately preceding the second syllable of the verb stem, and the undergoer (tentative, ‘object’) immediately following the first syllable of the verb stem (assuming there is one), as shown here:

2. **naxʔu** “hear” transitive; sense-perception <sb hears sth, sb> (2 participants, perceiver/stimulus)

	VERB STEM	UNDERGOER	ACTOR	VERB STEM	PL
I heard him/her/it	na	∅	wá	xʔu	∅
S/he heard me	na	má	∅	xʔu	∅
You heard him/her/it	na	∅	ya	xʔu	∅
You heard me	na	má	ya	xʔu	∅
S/he heard you	na	ní	∅	xʔu	∅
S/he heard him/her/it	na	∅	∅	xʔu	∅
S/he heard them	na	wícha	∅	xʔu	∅
You heard them	na	wícha	ya	xʔu	∅
They heard them	na	wícha	∅	xʔu	pi

Examples 3 and 4 are intransitive verbs that involve an undergoer.

3. **ištíma** “to sleep” intransitive verb, stative role of undergoer

	VERB STEM	UNDERGOER	ACTOR	VERB STEM	PL
1sg I sleep		m		ištíme	∅
2sg you sleep		n		ištíme	∅
3sg (s) sleeps				ištíme	∅
1pl					
2pl					
3pl they sleep		∅		ištíma	pi

4. **khúža** “be sick” intransitive verb (stative verb) role of undergoer

	VERB STEM	UNDERGOER	ACTOR	VERB STEM	PL
1sg I am sick		ma		khúže	∅
2sg you are sick		ni		khúže	∅
3sg (s)he is sick		∅		khúže	∅
1pl					
2pl					
3pl they are sick		∅		khúža	pi

t’a “die” intransitive verb (achievement?) role of undergoer

	VERB STEM	UNDERGOER	ACTOR	VERB STEM	PL
1sg I die		ma		t’é	∅
2sg you die		ni		t’é	∅
3sg (s)he dies		∅		t’é	∅
1pl					
2pl					
3pl they die				t’a	pi

The markers for 1sg and 2sg appear to be **ma-** and **ni-** (although in the case of *ištíme*, it seems there’s a vowel drop or change occurs). After organizing the data (as shown above), and after discussion with you and looking through Croft<sup>1</sup> and Payne<sup>2</sup>, I finally recognized the **split intransitive** pattern of Lakhota. As shown in the example data, intransitive verbs are marked

<sup>1</sup> *Radical Construction Grammar* (p. 162), by W. Croft Oxford University Press (2001)

<sup>2</sup> *Exploring Language Structure* (p. 224), by T. Payne (2006), and

similarly to either the Actor or the Undergoer of the transitive verbs. According to notes<sup>3</sup> (and as seems apparent now, from the data), the issue has to do with volition, as follows:

- argument for non-volitional intransitive verb (*sleep, die, be sick*) is marked the same as the undergoer argument with transitive verbs (example 2's U<sub>T</sub>), and
- argument for the volitional intransitive verb (*arrive, go*) is marked the same as the Actor argument of the transitive verb (example 2's A<sub>T</sub>).

So the split intransitive gives us two different S's: S<sub>Actor</sub> and S<sub>Undergoer</sub>. Not sure what that means in terms of neutralization, though, but I just make a note.

Here are other morphemes identified in the data:

<b>NOUNS</b>	<b>DETERMINERS</b>	<b>CONJUNCTIONS</b>	<b>OTHER</b>
hokšíla 'boy'	ki 'the'	čha 'and so'	he INT marker
igmú 'cat'	wə 'a'	čhəké 'and'	
ixʔé 'rock'	lei 'the'	nə 'and'	
mathó 'bear'			
wašíču 'whiteman'	<b>DEICTICS</b>		
wíyą 'woman'	lé 'this'??		
wówapi 'book'	hená 'those'		

Additional verbs from the data include these:

VERB	EXAMPLE DATA	V STEM	UNDERGOER	ACTOR	-V STEM	SUFFIX, MARKER
apha 'hit'	39. Amáphaye "hit me"	a-	má	?	pha	ye imperative
iblúthe <sup>4</sup> 'try'	29, 30, 31, 32: I tried...	i-		bl	úthe	
kte 'kill'	12. ktépi ('they killed...')	?		∅	kté	pi plural, 'they'
	37. wičhákte (it killed)	?	wíčha	∅	kte	
slolye 'know'	11. 'I know...'	slol-	∅	wá	ye	
manú 'steal'	'to steal'					
wəyąka 'see'	8. wəyąke	wə-				
	17. wəwíčhayąka	wə-	wíčha		yąka	
	18. wəwíčhayąkí	wə	wíčha		yąkí	
	33. wəwíčhablake	wə	wíčha	bl	ake	
yaxtáke 'bite'	22. 'it bit it'	yax	∅	∅	táke	

In terms of clause structure, Lakhota follows a strict sequence (tentatively labeled, S-O-V) pattern: the only examples among the data that don't have Verb final are the interrogative constructions (9, 10), whose only distinction is that they end with the question particle, 'he' (similar to Mandarin in this regard, with NPs 'in situ' and the question particle simply added to the end of the sentence).

All other example Lakhota clauses follow what turns out to be a fairly predictable order—Actor, then Undergoer, then Verb, with the only other exceptions being 6.

<sup>3</sup> Notes in book from Ling 112 class, Fall 2010

<sup>4</sup> Van Valin 2005, p.241, confirms what had been a hunch.

Interestingly, however, the verb morphology (the infixes that cross-reference the NPs or function as PRO- nouns in the core) show the opposite ordering scheme, that is, the Undergoer infix precedes the Actor infix. This pattern is seen throughout the data.

## 2. Lakhota Constructions

In the Lakhota data we have the following constructions:

- Intransitive constructions (1, 3, 4; pronominal cross-reference only; no NPs)
- Transitive verb construction (2; pronominal cross-reference only, no NPs)
- Simple declarative constructions (5, 6, 7, 8)
- Interrogative (9, 10)
- Relative clause (11)
- Cross-clause co-reference (15, 16, 18, 20, 23, 24, 25, 26, 27, 28)
- Coordinate clause constructions (12, 13, 14)
- Sub-ordination construction (19, 21, 22)
- Control constructions (29, 30, 31, 32)
- Complementary clause construction (embedded clause as complement) (33, 34, 35, 36, 37, 38)
- Imperative (39, 40, 41)

## 3. Grammatical Relations Analysis

### Declarative construction

In this construction it might seem that we have neutralization of the A<sub>T</sub> and the U<sub>T</sub> because of example 6, but the fact that example 8's alternative reading is not allowed suggests that there's some kind of restriction on the type of undergoer that's allowed. In this example, the only difference between 6 and the other examples is that 1) "the rock" is a non-human undergoer, and 2) the 'rock' is specified by a deictic "this/a"—so I'm not sure what to make of this. Taking this at face value, though, I'll say that the A<sub>T</sub> and U<sub>T</sub> are neutralized in this construction, and that the controller is the A<sub>T</sub> in these clauses (actually, I think it's the 3sgA-PRO on the core verb that is in fact the controller in these clauses, given that it's a head-marking language—or is that true?)

5.	Hokšíla ki ixʔé wə wəyáke. <small>wa-∅-∅-yáke 3sgU.3sgA-see</small> boy the rock a A <sub>T</sub> U <sub>T</sub> V <sub>T</sub> The boy saw a rock.	A <sub>T</sub> U <sub>T</sub> V <sub>T</sub>
6.	Ixʔé ki lé/wə hokšíla ki wəyáke. <small>wa-∅-∅-yáke 3sgU.3sgA-see</small> rock the this/a boy the U <sub>T</sub> A <sub>T</sub> V <sub>T</sub> The boy saw this/a rock.	U <sub>T</sub> A <sub>T</sub> V <sub>T</sub>
7.	Hokšíla ki wíyą ki wəyáke. <small>wa-∅-∅-yáke -3sgU.3sgA-see</small> boy the woman the A <sub>T</sub> U <sub>T</sub> V <sub>T</sub> The boy saw the woman.	A <sub>T</sub> U <sub>T</sub> V <sub>T</sub>

8.	<p>Wíyą ki      hokšíla ki      wąyáke.</p> <p>woman the      boy      the      wa-∅-∅-yáke -3sgU. 3sgA-see</p> <p>A<sub>T</sub>                      U<sub>T</sub>                      V<sub>T</sub></p> <p>The woman saw the boy. *The boy saw the woman.</p>	<p>A<sub>T</sub> U<sub>T</sub> V<sub>T</sub></p> <p>*U<sub>T</sub> A<sub>T</sub> V<sub>T</sub></p>
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Looking at data from examples 1, 2, 3, and 4 in conjunction with 5-8 shows us that there's a neutralization of semantic roles with respect to A<sub>T</sub>. As can be seen here, the A of the intransitive verb is marked similarly to the A<sub>T</sub>, while the U of the intransitive verbs is marked similarly to the U<sub>T</sub> of the transitive verbs in 2. Since the intransitive verb is specified using S, we have two different S-patterns, S<sub>Actor</sub> and S<sub>Undergoer</sub>. So I think the result is a neutralization pattern for the declarative construction [S<sub>A</sub>, S<sub>U</sub>, A<sub>T</sub>].

**Declarative [Intransitive verbs (motion)]**

1.	wahí	I arrive	A <sub>I</sub>	S <sub>Actor</sub>
	yahí	you arrive		
	hí	(s)he arrives		
	hípi	they arrive		
	blé	I go	A <sub>I</sub>	S <sub>Actor</sub>
	lé	you go		
	yé	(s)he goes		
	yápi	they go		

**Intransitive verbs (stative)**

3.	mištíme	I sleep	U <sub>I</sub>	S <sub>Undergoer</sub>
	ništíme	you sleep		
	ištíme	(s)he sleeps		
	ištímapi	they sleep		
4.	makhúže	I am sick	U <sub>I</sub>	S <sub>Undergoer</sub>
	nikhúže	you are sick		
	khúže	(s)he is sick		
	khúžapi	they are sick		
	mat'é	I die	U <sub>I</sub>	S <sub>Undergoer</sub>
	nit'é	you die		
	t'é	(s)he dies		
	t'api	they die		

**Transitive verb (perception)**

2.	nawáxʔų	I heard him/her/it	na-∅-wá-xʔų	3PROSG 1PRO-∅	U <sub>T</sub> A <sub>T</sub>
	namáxʔų	(s)he heard me	na-má-∅-xʔų	1PROSG 3PRO-∅	U <sub>T</sub> A <sub>T</sub>
	nayáxʔų	you heard him/her/it	na-∅-yá-xʔų	3PROSG 2PRO-∅	U <sub>T</sub> A <sub>T</sub>
	namáyaxʔų	you heard me	na-má-yá-xʔų	1PROSG 2PRO-∅	U <sub>T</sub> A <sub>T</sub>
	naníxʔų	(s)he heard you	na- ní-∅-wá-xʔų	2PROSG 3PRO-∅	U <sub>T</sub> A <sub>T</sub>
	naxʔų	(s)he heard him/her/it	na-∅-∅-xʔų	3PROSG 3PRO-∅	U <sub>T</sub> A <sub>T</sub>
	nawíčhaxʔų	(s)he heard them	na-wíčha-∅-xʔų	3PROpl 3PRO-∅	U <sub>T</sub> A <sub>T</sub>
	nawíčhayaxʔų	you heard them	na wíčha-ya-xʔų	3PROpl 2PRO-∅	U <sub>T</sub> A <sub>T</sub>
	nawíčhaxʔųpi	they heard them	na-wíčha-∅-xʔų-pi	3PROpl 3PRO-pl	U <sub>T</sub> A <sub>T</sub>

**Interrogative construction**

The structure of the interrogative clauses is the same pattern as the declarative, with the addition of the 'he' question particle at the end of the sentence. Again, the A<sub>T</sub> is the controller of agreement for the clause. Example 10's \* reading suggests that Lakhota clause structure is constrained and that

the A<sub>T</sub> is the controller. There is no pivot in these clauses. I do not see that there's any neutralization in this construction.

9.	Hokšíla ki táku/tuwá wáyáka he? <small>boy the what/who wa-Ø-Ø-yáka -3sgU.3sgA-see Q-particle</small> A <sub>T</sub> U <sub>T</sub> V <sub>T</sub>	A <sub>T</sub> U <sub>T</sub> V <sub>T</sub> he
10.	Tuwá wíyą ki wáyáka he? <small>who woman the wa-Ø-Ø-yáka -3sgU.3sgA-see Q-particle</small> A <sub>T</sub> U <sub>T</sub> V <sub>T</sub>	A <sub>T</sub> U <sub>T</sub> V <sub>T</sub> he

What/who did the boy see?  
Who saw the woman? \*Who did the woman see?

**Relative clause**

This construction (11, below) is interesting. Both the A<sub>T</sub> and U<sub>T</sub> are marked by indefinite determiners, and the definite determiner ‘ki’ precedes the ‘relativizer.’ The gloss provides two alternative interpretations, and it seems that the ‘ki’ definite determiner can ‘float’ to either NP in the relative clause. This may mean that the construction has two controllers in the relative clause? Unfortunately, it just occurred to me that a single sentence likely does not an entire ‘construction’ make, and that it doesn’t seem possible to deduce neutralization without comparison data—so this sentence likely belongs elsewhere.

11.	[Hokšíla wą wíyą wą wáyáke [ ki le ] slolwáye. <small>boy a woman a -Ø-Ø-saw [the who ] vstem -3sgPRO.1sgPRO.know</small> A <sub>T</sub> U <sub>T</sub> V <sub>T</sub> [ RELATIVIZER] V <sub>T</sub>	slol -Ø -wá -ye
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I know the boy who saw a woman. I know the woman who a boy saw.

**Cross-clause Co-reference**

This construction seems to have restricted neutralization for the semantic roles of [S, A<sub>T</sub>]. (Since both S<sub>A</sub> and S<sub>U</sub> are treated alike in these examples, I’m neutralizing them to a single S role.) The controller in each of these is the S or A<sub>T</sub> NP in the first clause, and the pivot is the ‘gap’ in the second clause.

15.	Wašíču ki hená hípi ną [__A__] mathó ki ktépi. <small>whiteman the those 3A.arrive.pl and bear the 3U.3A.kill.pl</small> S <sub>A</sub> V <sub>i</sub> CONJ pivot U <sub>T</sub> V <sub>T</sub>	S <sub>A</sub> , A <sub>T</sub>
16.	Mathó ki, wašíču ki hená hípi ną ktépi. <small>bear the whiteman the those 3A.arrive.pl and 3U.3A.kill.3pl</small> U <sub>T</sub> S <sub>A</sub> V <sub>i</sub> CONJ V <sub>T</sub>	(U <sub>T</sub> ), S <sub>A</sub> A <sub>T</sub>
18.	Mathó ki wašíču ki hená wawíčhayąkí ną wičhákte. <small>bear the whiteman the those 3A.arrive.pl and 3U.3A.kill.3pl</small> A <sub>T</sub> A <sub>T</sub>	A <sub>T</sub> A <sub>T</sub>

	<p>wa-wicha-∅-yaki          bear the whiteman the those wa-3plU-3A.see and wicha-∅-kte          3plU.3sgA.kill  <b>A<sub>T</sub></b> <b>U<sub>T</sub></b> <b>V<sub>T</sub></b> <b>CONJ</b> <b>V<sub>T</sub></b></p> <p>The bear saw those whitemen and killed them.</p>	
20.	<p><b>Mathó ki igmú ki aphí ną iyáye.</b>          bear<sub>i</sub> the cat the ∅U.∅A<sub>i</sub>.hit and ∅-A<sub>i</sub>-ran.away  <b>A<sub>T</sub></b> <b>U<sub>T</sub></b> <b>V<sub>T</sub></b> <b>CONJ</b> <b>S<sub>A</sub></b> <b>V<sub>I</sub></b></p> <p>The bear<sub>i</sub> hit the cat, and it<sub>i</sub> ran away.</p>	<b>A<sub>T</sub> U<sub>T</sub>, S<sub>A</sub></b>
23.	<p><b>Mathó ki hí ną t'é.</b>          bear the ∅A-arrive and ∅U-died  <b>S<sub>A</sub></b> <b>V<sub>I</sub></b> <b>CONJ</b> <b>S<sub>U</sub></b> <b>V<sub>I</sub></b></p> <p>The bear came and died.</p>	<b>S<sub>A</sub> S<sub>U</sub></b>
24.	<p><b>Mathó ki hí ną iyáye.</b>          bear the ∅A-arrive and ∅A-ran.away  <b>S<sub>A</sub></b> <b>V<sub>I</sub></b> <b>CONJ</b> <b>S<sub>A</sub></b> <b>V<sub>I</sub></b></p> <p>The bear came and ran away.</p>	<b>S<sub>A</sub> S<sub>A</sub></b>
25.	<p><b>Wašiču ki mathó ki wạyạkí ną t'é.</b>          whiteman the bear the ∅U.∅A.saw and ∅U.died  <b>A<sub>T</sub></b> <b>U<sub>T</sub></b> <b>V<sub>T</sub></b> <b>CONJ</b> <b>V<sub>I</sub></b></p> <p>The whiteman saw the bear and died.</p>	<b>A<sub>T</sub> U<sub>T</sub> S<sub>U</sub></b>
26.	<p><b>Wašiču ki mathó ki wạyạkí ną iyáye.</b>          whiteman the bear the ∅U.∅A.saw and ∅A.ran.away  <b>A<sub>T</sub></b> <b>U<sub>T</sub></b> <b>V<sub>T</sub></b> <b>CONJ</b> <b>S<sub>A</sub></b> <b>V<sub>I</sub></b></p> <p>The whiteman saw the bear and ran away.</p>	<b>A<sub>T</sub> U<sub>T</sub> S<sub>A</sub></b>
27.	<p><b>Mathó lei khúži ną t'é.</b>          bear the ∅-U-sick and ∅U.die  <b>S<sub>U</sub></b> <b>V<sub>I</sub></b> <b>CONJ</b> <b>S<sub>U</sub></b> <b>V<sub>I</sub></b></p> <p>The bear was sick and died.</p>	<b>S<sub>U</sub> S<sub>U</sub></b>
28.	<p><b>Mathó ki khúži ną iyáye.</b>          bear the ∅U.sick and ∅A.ran.away  <b>S<sub>U</sub></b> <b>S<sub>U</sub></b> <b>V<sub>I</sub></b> <b>CONJ</b> <b>V<sub>I</sub></b></p> <p>The bear was sick and ran away.</p>	<b>S<sub>U</sub> S<sub>A</sub></b>

### Coordinate Construction

This construction seems to behave like a switch-function (although there's no voice opposition), but the *S<sub>A</sub>* in the first clause becomes the *U<sub>T</sub>* in the second clause—so this must be neutralization of semantic roles. The PSA here would be [*S<sub>A</sub>*, *U<sub>T</sub>*]. However, I'm still not clear on whether something is "missing" in these examples or not, and given the morphology on the verb, how do we decide which is the controller and if there's a pivot (the NP or the PRO on the verb?) Perhaps what I'm seeing here are two controllers—the NP in the first clause, and the PRO- on the verb in the second clause.

12.	<p><b>Mathó wạ hí čhạké wašiču ki hená ktépi.</b>          bear a ∅A.arrive and whitemen the those ∅-∅-kill-pl  <b>V<sub>I</sub></b> <b>CONJ</b> <b>S<sub>A</sub></b> <b>V<sub>I</sub></b> <b>3U.3A.kill.pl</b></p>	<b>S<sub>A</sub> =&gt;U<sub>T</sub></b>
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	<b>S<sub>A</sub></b>	S <sub>A</sub> -pro-x-ref	CONJ	A <sub>T</sub>		V <sub>T</sub>		
	A bear came, and those whitemen killed it.							
13.	Wašiču	ki	hená,	mathó wə	hí	čḥaké	ktépi.	A <sub>T</sub> , S <sub>A</sub> => U <sub>T</sub>
	whiteman	the	those	bear a	∅-hi 3A-arrive	and	∅-∅-kte-pi 3U.3A.kill.pl	
	A <sub>T</sub>		<b>S<sub>A</sub></b>	V <sub>I</sub>	CONJ		V <sub>T</sub>	
	Those whitemen, a bear came and they killed it.							
14.	Wašiču	ki	hená	hípi	čḥaké	mathó ki	wičhákte.	S <sub>A</sub> =>U <sub>T</sub>
	whiteman	the	those	∅-A-arrive.pl	and	bear the	wičha-∅A-kill 3Upl.3A.kill	
	<b>S<sub>A</sub></b>		V <sub>I</sub>	CONJ		<b>U<sub>T</sub></b>	A <sub>T</sub> V <sub>T</sub>	
	Those whitemen arrived, and the bear killed them.							
17.	Mathó ki	wašiču	ki	hená	wəwíčhayəka	čḥaké	ktépi.	A <sub>T</sub> => U <sub>T</sub>
	bear the	whitemen the	those	wa-wičha.∅Asaw	and		∅-∅-kill-pl 3U-3A-kill-pl	
	<b>A<sub>T</sub></b>	U <sub>T</sub>		V <sub>T</sub>	CONJ		V <sub>T</sub>	
	The bear saw those whitemen, and they killed it.							

### Subordination Construction

As with the coordinate construction (above), this construction also seems to be providing a switch-function, in this case, the Undergoer of the first clause becomes the Actor of the second clause, while the Actor of Clause 1 becomes Undergoer of Clause 2. Is this PSA actually a semantic PSA, based solely on the role of Undergoer in clause 1 becoming Actor in clause 2? This pattern is the reverse of the coordinate construction.

19.	Mathó ki	<b>igmú ki</b>	aphá	čha		iyáye.	U <sub>T</sub> S <sub>A</sub>	
	bear the	cat the	∅U <sub>i</sub> .∅A.hit	and so		∅A <sub>i</sub> -ran.away		
	A <sub>T</sub>	<b>U<sub>T</sub></b>	V <sub>T</sub>	CONJ		S <sub>A</sub> V <sub>I</sub>		
	The bear hit the cat <sub>i</sub> , and so it <sub>i</sub> ran away.							
21.	Mathó ki	<b>igmú ki</b>	aphá	čha	t'é.		U <sub>T</sub> S <sub>A</sub>	
	bear the	cat the	∅U <sub>i</sub> .∅A.hit	and so	∅A <sub>i</sub> -died			
	A <sub>T</sub>	<b>U<sub>T</sub></b>	V <sub>T</sub>	CONJ	<b>S<sub>U</sub></b>	V <sub>I</sub>		
	The bear hit the cat <sub>i</sub> , and so it <sub>i</sub> died.							
22.	Mathó ki	<b>igmú ki</b>	aphá	čha		yaxtáke.	U <sub>T</sub> A <sub>T</sub>	
	bear the	cat the	∅U <sub>i</sub> .∅A <sub>i</sub> .hit	and so		∅U <sub>i</sub> .∅A <sub>i</sub> .bit		
	A <sub>T</sub>	<b>U<sub>T</sub></b>	V <sub>T</sub>	CONJ		it <sub>i</sub> it <sub>j</sub> V <sub>T</sub>		
	The bear <sub>i</sub> hit the cat <sub>j</sub> , and so it <sub>j</sub> bit it <sub>i</sub> .							

### Control construction

In this construction, it seems there's restricted neutralization of semantic roles, but it seems like the neutralization applies to the S<sub>A</sub> and S<sub>U</sub> of the subordinate clause. Regardless of whether the Intransitive verb takes an undergoer or an actor, the marking is the same –that is, non-finite verb form. Example 32 seems to suggest that Lakhotá does not have voice opposition. The \* on the morphology indicates that the deletion is obligatory, which I think means that there's a pivot in these clauses located in place of the infix.



29.	Wówapi ki book the	manú/*mawánu 'to steal'/*1sg-U.steal VT	iblúthe. 1sgAPRO.try VT Controller ('bl')
	U <sub>T</sub> I tried to steal the book.		
30.	Ištíme/*mištíme 'to sleep'/*1PROU.sleep	iblúthe. 1sgA.try VT	
	V <sub>I</sub> I tried to sleep.		
31.	Iyáye/*iyáwaye 'to run.away'/*1PROA.RUN-AWAY	iblúthe. 1sg-A.try VT	
	V <sub>I</sub> I tried to run away.		
32.	*Nayáxʔu *na-∅3sgU.2sgA-xʔu	iblúthe. i-1sgA-úthe VT	
	you heard him/her/it *I tried for you to hear [me]. (intended meaning: "I tried to be heard by you")		

#### Complementary clause (co-subordination, embedded clause as complement)

Unlike the Lakota control construction examples, in which deletion of the cross-reference on the verb in the embedded clause (subordinate clause) is obligatory, this construction seems to allow either form, which must mean that this particular construction has no pivot. I think that the controller in each case is the Undergoer PRO marking on the verb in the first clause (wawíčhablake, in 33, 34, 35, 36; and 'Mathó ki' in 37). The \* on 36's alternate gloss confirms this, I think.

33.	Ištíme/ištímapi they sleep /3Usleep.pl S <sub>A</sub>	wawíčhablake. -3plU.1sgA-saw U <sub>T</sub> A <sub>T</sub>	
	I saw them sleeping.		
34.	Hí(pi) 'arrive' /3A.pl S <sub>A</sub>	wawíčhablake. 3plU.1sgA.saw U <sub>T</sub> A <sub>T</sub>	
	I saw them arrive.		
35.	Hí(pi) 'arrive' /3A.pl S <sub>A</sub>	nawíčhayaxʔu. 3plU.2sgA.hear U <sub>T</sub> A <sub>T</sub>	
	You heard them arrive.		
36.	Mathó ki bear the	kté(pi) ∅U.∅A-kill. (pl) U <sub>T</sub> U <sub>T</sub> .A <sub>T</sub> -pl	wawíčhablake. 3plU.1sgA.saw U <sub>T</sub> A <sub>T</sub> them I saw
	the bear it they killed I saw them kill the bear.		*I saw the bear kill them.
37.	Mathó ki bear the	wíčhákte U3pl.∅A-kill U <sub>T</sub> A <sub>T</sub>	wabláke. 3U∅.1sgA.saw U <sub>T</sub> A <sub>T</sub>
	I saw the bear kill them.		

